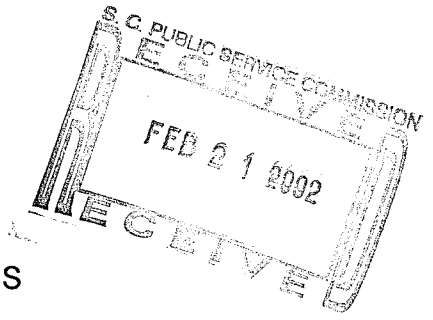

KIAWAH ISLAND UTILITY, INC.

DOCKET NO. 2001-164-W/S

PRE-FILED TESTIMONY OF BECKY DENNIS

BEFORE THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

Testimony Prepared: February 20, 2002

Hearing Date: March 13, 2002

THIS TESTIMONY IS FILED PURSUANT TO PSC ORDER DATED JANUARY 15, 2002. THE APPLICANT RESERVES THE RIGHT TO SUPPLEMENT THIS TESTIMONY AND TO PROVIDE REPLY TESTIMONY TO THE TESTIMONY THAT WILL BE PRE-FILED BY THE COMMISSION STAFF AND INTERVENORS.

MR. WALKER: Ms. Dennis, would you please give us your full name and current occupation?

MS. DENNIS: My name is Becky Dennis. I am employed as the General Manager of Kiawah Island Utility, Inc.

MR. WALKER: Where is the Utility Company's office?

MS DENNIS: The Utility's office is located at 31 Sora Rail Road, on Kiawah Island.

MR. WALKER: How many persons does the Utility Company employ?

MS DENNIS: There are currently twelve (12) full-time employees.

MR. WALKER: Give us an overview of the water system and the customers serviced by it.

MS. DENNIS: On December 31, 2000, the Utility served 3,151 water customers. Most of these are residential customers. The Utility services its water customers through approximately 50 miles of water pipelines on Kiawah Island. The average daily flow in the test year 2000 was 2.340 million gallons for potable water, with an additional .920 million

DL DV
DL DV

gallons of combined effluent and well water to supplement golf course demands. The peak day demand was 4.378 million gallons, which occurred on October 22, 2000.

The water system is operated under South Carolina DHEC Permit No. 1010008.

MR. WALKER: Tell us about the wastewater customers and wastewater facilities of the Utility.

MS. DENNIS: During the test year ending December 31, 2000, the Utility served 2,764 sewer customers. Most of these are residential customers. The Utility's sewer system is comprised of gravity collection mains, force mains, and treated effluent transfer mains, aggregating approximately 58 miles, 41 sewage-pumping stations, and a wastewater treatment facility. The wastewater treatment facility is located at the central plant at 31 Sora Rail Road. During the test year (2000), the average daily flow was 508,000 gallons (.508 MGD) with a maximum flow day of 1,007,000 gallons (1.007MGD), which occurred on August 6, 2000.

The Utility's wastewater facility's capacity is rated at 1.1 million gallons per day and operates under S.C. DHEC Permit #ND0017361. There have been no quality parameter violations.

MR. WALKER: How long have you been employed by the Utility?

MS. DENNIS: I have worked at KIU since 1978. My first position was Utility Clerk/Utility Works Operator Trainee. In 1979 I was promoted to Assistant Plant Operator/Clerk/Lab. In 1984 I was promoted to Supervisor Customer Service/Plant operations. In 1993 I was promoted to General Manager.

Over the years, I have been involved in every aspect of the Utility's operation on Kiawah Island.

MR. WALKER: Are you an employee of KRA?

MS. DENNIS: No.

MR. WALKER: What responsibilities have you had during your employment by the Utility?

MS. DENNIS: From 1978 to 1993 I did the following:

- Meter installation repair, reading, billing, receivable, customer service;
- Line repairs (both water and waste water);
- Performed laboratory duties - daily, weekly, monthly, monitoring;
- General maintenance duties - mowing, weedeating, pulling sand spurs;
- General plant upkeep; and
- General accounts payable duties.

Since 1993 I have served as General Manager with responsibility for the management and supervision of KIU's entire operations, which include:

- Monitor the activities of all areas of the Utility daily and make necessary changes as warranted;
- Ensure that water and wastewater operations meet all regulatory requirements while striving to perform beyond the expected level of service required by each.
- Coordinate with regulatory agencies as necessary to stay abreast of the ever-changing regulations associated with water and wastewater facilities;
- Coordinate plant inspections with DHEC, PSC, OSHA, and other regulatory agencies;

- Manage operating costs to ensure that each dollar spent adds value to the utility;
- Supervise employees, making sure they have the proper equipment to perform their jobs safely and efficiently;
- Make sure employees are properly trained to handle not only the day-to-day situations that arise, but also to be able to respond with confidence during an emergency;
- Handle customer inquiries and complaints promptly and efficiently;
- Generate data necessary to complete rate applications as required by revenue shortfalls; and
- Coordinate all data inquiries and provide requested information associated with all rate applications.

MR. WALKER: Are you active in any associations involving public utilities that provide water and sewer services?

MS. DENNIS: I am Immediate Past President of the Water Environment Association of South Carolina. It is a statewide organization with approximately 3061 members. Additionally, I am a member of the Water Environment Federation, the American Waterworks Association, and the South Carolina Rural Water Association.

MR. WALKER: Have you received any special training for running the Utility?

MS. DENNIS: In addition to the experience I have acquired on this job in working with the Utility for more than 20 years, I have also obtained an "A" certification from the South Carolina LLR, Environmental Certification Board for utility water and wastewater. I would

like to point out that two other employees, Keith Weeks and Vicky Dyke, have obtained these same certifications. Six other employees have also obtained water or wastewater certifications at various levels from the South Carolina LLR, Environmental Certification Board for utility water and wastewater. We take our work seriously and pride ourselves on the skills of our employees. Our customers demand efficient, prompt, high quality service. The only way to accomplish this is through qualified employees.

MR. WALKER: Is the Utility's operation monitored by DHEC?

MS. DENNIS: Yes.

MR. WALKER: Has the Utility Company ever received an unfavorable rating from DHEC?

MS. DENNIS: No. In fact we recently received two positive reports from DHEC in which they performed an exhaustive analysis of the water system and a compliance sampling inspection on the wastewater facility. I have attached a copy of those reports dated February 4, 2002, and February 11, 2002, as Exhibit 1 to my testimony.

MR. WALKER: Does the Utility keep a close eye on quality control.

MS. DENNIS: Definitely. In addition to the normal quality controls, the Utility has been a leader in compliance in the monitoring for lead and copper required by the Environmental Protection Agency. The Utility was one of the first utilities in the state to qualify for "ultra-reduced" monitoring, based on its exceptional compliance.

MR. WALKER: Does the Utility keep track of customer complaints or comments?

MS. DENNIS: Yes, our summary of these for the test year is set forth in response to the Commission's Data Request No. 1. Most calls or letters from customers relate to the bills. Most felt they had not consumed the quantity of water reflected on the bills. We then

checked the meters and determined the bills were accurate. We had many comments on the bill form, mostly relating to damage by the postal service.

We do our best to be conscientious and attentive, to provide the best service that we can. The absence of any significant complaints attests to the quality of the services rendered to our roughly 3,200 customers.

MR. WALKER: Is the price of the water that you purchase from St. Johns Water Company stable?

MS. DENNIS: No, it has steadily increased since 1997, the last test year. Also, we are required under our contract with St. Johns to pay a monthly operation and maintenance expense, which also has increased annually since 1997.

MR. WALKER: Are you familiar with the Utility's basis for the proposed charges for the various miscellaneous items listed on page ten of Appendix C to the Application, for such items as service discontinuance and reconnection charges?

MS. DENNIS: Yes. As to the reconnection fee described in Item No. 1, we clarified the language to specify when the re-connection fee of three times the monthly basic facilities charge applies. This charge does not apply if the discontinuance of service was for a legitimate reason or due to the termination of a particular customer's account.

MR. WALKER: The Utility has a management agreement with KRA. Do any of the employees of KRA perform services for the Utility?

MS. DENNIS: Yes, there are many areas where KRA employees furnish services to the Utility. These persons work for KRA and are not paid by the Utility, even though their services are vital to the successful operation of the Utility.

MR. WALKER: What services do these KRA employees provide for the Utility Company?

MS. DENNIS: KRA's development department coordinates all water and sewer line engineering and construction (including design, bidding, and permitting) according to DHEC specifications. The development of a subdivision entails the proper scheduling of not only water and sewer installations but also power, drainage, and roads. No DHEC operating permit for water or sewer is issued until the roads are in and the shoulders are grassed. KIU must submit a letter accepting the lines for operation and maintenance prior to DHEC approval. KRA's development department also acts as liaison for permitting, which includes zoning, clearing, OCRM, variances, Town right-of-ways, and other permits necessary to insure that each area is developed according to established town, county, state, and federal regulations.

KRA's personnel department prepares the bi-weekly payroll of KIU employees. This service includes reconciling hours, managing benefits and payroll changes. The KRA employees spend considerable time managing the benefits program offered to the Utility's employees while keeping the costs of service down. The Human Resources Department has negotiated better health and dental insurance coverage and established a more efficient provider for the 401(k) and cafeteria plans than the Utility could on its own. All of these are a considerable benefit to the Utility and its employees. If KIU were to negotiate insurance and retirement plans without the benefit of its parent company, the rates would be higher and the benefits lower. KRA is in a far better negotiating position with insurance companies because of the number of employees they place coverage for. If KIU acted alone, it would be providing coverage for only up to 14 employees.

KRA also obtains favorable insurance rates for property and liability, which KIU could not obtain if it were to go out on its own.

Because of the volume of business KRA does annually, KRA is able to negotiate favorable rates on loans for capital improvements necessary for the Utility. Many of these capital improvements are required by an agreement with the Town of Kiawah or by state or federal guidelines requiring certain improvements according to customer growth.

KRA assists in setting the annual budget. KRA monitors the spending of KIU and provides financial management reviews monthly. KRA also analyzes the performance and capacity of our systems and provides us with a plant expansion capital analysis and review.

KRA furnishes long range planning services to the Utility.

KRA's marketing department assists KIU in communication as required by federal and state regulation, EPA, and DHEC. New federal regulations require each water utility to develop and publish a Consumer Confidence Report ("CCR") to all customers. This report is exhaustive in detail and information concerning the source of water supply. KRA's marketing department also provides other graphic and production support for other customer communications, including the annual report. They develop enlarged graphs, maps, and charts for our use when needed.

MR. WALKER: How does the Utility provide water for golf course irrigation?

MS. DENNIS: The Utility provides a blended source of water for golf irrigation. This blend is made up of effluent, deep well water, and potable water, as available and needed. The Utility has a series of holding cells located at our central site on Sora Rail Road that holds the water used by all five courses for irrigation purposes. Each source (effluent, well,

and potable) is metered as it flows into the holding cells, where it is stored until needed by the courses.

MR. WALKER: Has the Utility requested a change in the manner in which the basic facilities charges for golf course irrigation in Rate Schedule 6 of Appendix C are applied?

MS. DENNIS: Yes. In prior rate applications and schedules approved by the Commission, one monthly basic facilities charge per water source was charged. The Utility then divided this amount by the number of golf courses and billed each course for its share. We have requested that the basic facilities charge be changed so that it is assessed per golf course customer.

MR. WALKER: Are all five of the golf courses still customers of KIU?

MS. DENNIS: No. The Ocean Course purchased deep well no. 2 in a sale approved by the Commission on May 18, 1999, in Docket No. 1999-086-W. The Ocean Course then ceased being a day-to-day customer of the Utility and depends entirely on this well, but remains available for disposal of treated effluent as necessary. The Ocean Course's cessation of services was approved in an agreement among it, the Utility, and KRA.

MR. WALKER: Have you worked with John Guastella, the consultant employed by the Utility, to assist in the Utility's application for an adjustment in rates and charges?

MS. DENNIS: Yes, I worked very closely with John Guastella and Gary White, his colleague, in providing them the information they needed to prepare the schedules, exhibits, and appendices that are part of the rate application.

MR. WALKER: Do the schedules, exhibits, and appendices in the rate application accurately reflect the information you provided?

MS. DENNIS: Yes. I checked through their work thoroughly and found no discrepancies.

MR. WALKER: Why do you believe the requested increase in rates and charges is necessary?

MS. DENNIS: For all the reasons stated in our Application. The continued smooth operation of the Utility and provision of quality services require a positive operation margin. We have a very demanding clientele on Kiawah Island. We intend to provide the superior service that they have come to expect and receive from us over the years, yet we cannot continue to do so if the Utility is losing money.

THIS ENDS MY DIRECT TESTIMONY

D H E C
PROMOTE PROTECT PROSPER
2600 Bull Street
Columbia, SC 29201-1708

POSTED 2-21-02

S.C. PUBLIC SERVICE COMMISSION RECEIVED FEB 21 2002

FEB 06 2002

February 4, 2002

Becky Dennis
Kiawah Island
31 Sora Rail Road
Kiawah Island, SC 29455

Re: Kiawah Island
NPDES Permit No. ND0017361
Charleston County

Dear Ms. Dennis:

Attached are the results of the **Compliance Sampling Inspection** of your wastewater treatment facility performed by DHEC on October 24, 2001 to October 25, 2001. Sampling was performed in accordance with the NPDES permit and sample chain of custody was maintained by DHEC personnel. All sampling and analyses were performed according to DHEC Standard Operating Procedures Manual and Quality Assurance Procedures Plan.

A review of this data indicates that the wastewater was meeting applicable NPDES permit requirements during the sampling period; therefore, no response is necessary.

Please be informed that DHEC's Center for Waste Minimization offers a free, non-regulatory service to help facilities identify pollutant sources and develop programs to reduce them. Contact the Center at (803) 896-8986 for more information concerning this service.

If you have any questions regarding this inspection, please contact me at (803) 898-4041.

Sincerely,

Debra Boston
Facilities Compliance Manager
Pollution Source Compliance Section
Bureau of Water

Attachment
cc: District Director
Bob Burgess, Center for Waste Minimization

PROMOTE PROTECT PROSPER
South Carolina Department of Health and Environmental Control

Trident Environmental Quality Control District
1362 McMillan Avenue, Suite 300
Charleston, SC 29405
843-740-1590 Fax 843-740-1595

Serving:
Berkeley, Charleston and Dorchester Counties

February 11, 2002

FEB 13 2002

Ms. Becky Dennis, Manager
Kiawah Island Utility, Inc.
31 Sora Rail Road, Kiawah Island
John's Island, SC 29455

RE: Water System Sanitary Survey
Kiawah Island Utility, Inc. (WS #1010008)
Charleston County

Dear Ms. Dennis:

A sanitary survey of the Kiawah Island Utilities (KIU) water system was conducted on January 29, 2002. This was conducted in conjunction with a Town Survey of the water distribution system and inspection of the ASR well.

Attached for your reference is a copy of the form used while conducting the Sanitary Survey. Any deficiencies are noted by an "I" for needs improvement, or "U" for unsatisfactory. Comments regarding any noted deficiencies are provided following a description of the KIU water system. Please review the comments for clarity and accuracy and notify me of any discrepancies which should be addressed. You will notice a change in the report in that all booster pump and chlorine stations have been added as individual water plants. This is due to a request from the EPA on how we maintain our database

WATER SYSTEM DESCRIPTION

KIU receives Charleston CPW water via a 10" metered connection to the St. John's Water Company. The meter can provide continuous flows up to 5500 gpm with intermittent flows of up to 7000 gpm. Surface water enters the distribution system through a single meter pit located on the Kiawah Island Parkway near Bohicket Road. KIU is entitled to 60% of the available water delivered from the St. John's Water Company which is about 3.6 MGD at the current time. It is noted that this is generally achieved. On occasion, when St. John's loses power and relies on Charleston CPW to maintain pressure in their system, flows may be reduced for short periods of time until repairs are completed.

Potable water is stored in 1.0 MG and 2.5 MG ground water reservoirs at the Sora Rail Road facility and a 1.0 MG ground reservoir at the Down Island facility off Governor's Dr. The pumping stations at both facilities are a combined domestic and fire service system relying on the 4.5 MG of storage for pump withdrawal. Existing pumps at the Sora Rail Road facility are as follows:

Service Pump #1	40 HP	800 gpm
Service Pump #2	100 HP	1500 gpm
Service Pump #3	100 HP	1500 gpm
Service Pump #4	200 HP	3900 gpm
Primary Fire Pump	200 HP	2500 gpm
Secondary Fire Pump	200 HP	2500 gpm

Two emergency generators, one 400 KW and one 250 KW, are available at the Sora Rail Road facility and are dedicated for auxiliary power for the pump station.

The Down Island facility is equipped with two 50 HP service pumps rated at 1,000 gpm each and one 200 HP fire service pump rated at 4,000 gpm. Down Island also has a generator, rated at 250 KW, dedicated for use on the fire and service pumps during power outages. All generators are exercised on a weekly basis. Both the Down Island and Sora Rail Road facilities have the ability to feed gas chlorine though this is not commonly needed. Chlorination at the Sora Rail Road plant, if needed, may be achieved by using gas chlorination from the on-site waste water treatment plant's chlorination unit.

A deep well located at Sora Rail Road is used mainly to supplement golf irrigation but can be used as an emergency source of water. The Department must be notified if the emergency well is placed into operation for potable use. Because KIU has decided to forego routine monitoring of this well, a Boil Water Advisory must be issued if this should occur. The Department will conduct bacteriological, nitrate, and nitrite monitoring when the well is put on line. After satisfactory bacteriological results have been obtained, the Boil Water Advisory can be lifted. Department sampling of emergency wells for all Phase I, II, and V contaminants will be conducted in any quarter that the well is placed into operation.

KIU supplies 2,899 residential, 82 commercial, and 205 irrigation taps. There are 7 other irrigation meters for golf course use. These are supplied by a combination of deep well, lagoon, and purchased surface water. The service population, based on the county average population per household of 2.42 persons, is 7,016. This does not take into consideration services that are not residential in nature, or those which are considered rental property, and assumes year round occupancy of all residential services even though Kiawah Island is considered seasonal.

Comments referring to items on the survey report are as follows:

Item #1 - Water usage records for calendar year 2001 indicate that the average demand was 2.31 MGD, with a peak demand of 4.26 MGD. KIU is unique in that water is provided for golf course irrigation by way of a meter prior to the main water storage tanks at Sora Rail Road. Since all other customers are supplied by the Sora Rail Road facility, the demand can be inflated by golf course use which is controlled by KIU and delivered to the golf course upon request and availability. The demand sent to the distribution system from the Sora Rail Road water storage tanks averaged 2.19 MGD with a peak day demand of 3.385 MGD. The attached report also includes the addition of the ASR well which will supplement the supply during high demand periods. Though not yet approved for withdrawal and use in the distribution system, the ASR well will provide a source of potable water for peak shaving at a rate of approximately 700 gpm. Water withdrawn from the ASR well is disinfected with aqueous ammonia and sodium hypochlorite. Also, of the 205 irrigation meters, 38 are 1 ½" or above and can be automatically turned off at the plant should demand on the system become excessive. This control of irrigation water has been authorized by the Public Service Commission. Given that KIU can regulate demand through restricting irrigation water, combined with the amount of above ground storage, and the likely addition of the ASR well, this item is considered to be satisfactory. Future domestic and irrigation demands may necessitate additional (reliable) source water capacity.

Item # 12, 18, and 22 - Distribution water quality was checked by conducting the Town Survey. The testing procedure that is used for Town Survey's is the heterotrophic plate count (HPC) analysis, a procedure which measures general bacterial population in drinking water. An HPC of 500 organisms or more per milliliter of sample is an indicator of poor water quality. High plate counts may also mask total or fecal coliforms which would otherwise be detected during routine bacteriological monitoring.

The results of the Town Survey sampling are:

Location	Chlorine residual	Total/Fecal Coliform	HPC
1. 501 Old Dock Road	2.88 mg/L	absent/absent	3 CFU/mL
2. 367 Red Bay Road	3.01 mg/L	absent/absent	<1 CFU/mL
3. 10 Sand Alley	3.01 mg/L	absent/absent	1 CFU/mL
4. 57 Salthouse Lane	3.13 mg/L	absent/absent	1 CFU/mL
5. 10 Rhett's Bluff	2.88 mg/L	absent/absent	1 CFU/mL
6. 3 Royal Beach	3.13 mg/L	absent/absent	<1 CFU/mL
7. 145 Red Cedar	2.88 mg/L	absent/absent	<1 CFU/mL
8. 9 Terrapin	2.13 mg/L	absent/absent	2 CFU/mL
9. 38 Salt Cedar	2.88 mg/L	absent/absent	2 CFU/mL
10. Ocean Course Golf Maint. Fac.	1.63 mg/L	absent/absent	5 CFU/mL

The Surface Water Treatment Rule (SWTR) requires that a disinfectant residual be maintained everywhere in the distribution system or have HPC less than 500 CFU/mL as outlined in R.61-58.10(D)(2)(c)(i). All sites sampled met this requirement. It must be noted that residences with individual home water treatment units were avoided as sample points. These sites should be avoided as sample sites for compliance with the Total Coliform Rule, SWTR, and Lead and Copper Rule. Home

treatment units can render water corrosive or, if not properly maintained, can harbor and breed bacteria or create other water quality problems.

A systematic plan for flushing water mains incorporating, in concept, unidirectional flushing (UDF) methods, should be considered. Whether this is occurring was not discussed though it is apparent that adequate flushing is occurring.

These three items have been rated satisfactory.

Item 21 - The Total Coliform Rule requires that a minimum of 8 samples per month be collected from representative sites within the distribution system. KIU is complying with this requirement.

Item 28 - KIU is classified as a Group II Treatment Plant Group requiring a minimum "D" grade water treatment plant operator. KIU currently has on staff three "A" grade treatment plant operator's, one "C" grade treatment plant operator, two "D" grade treatment plant operator's, and one trainee. KIU's distribution system is regarded as a Distribution System Group III requiring a minimum "C" grade distribution certification. KIU currently has on staff four "C" grade distribution system operator's, three "D" grade distribution system operator's, and one trainee. KIU's current staffing is considered satisfactory.

A review of files and sampling conducted during the survey indicate that KIU is currently in full compliance with the Total Coliform Rule, Surface Water Treatment Rule, and the Lead and Copper Rule, and no major deficiencies were noted during the survey. Water quality issues related to the production of water and monitoring of source water parameters is inspected by oversight of production from the Charleston Commissioner's of Public Works Hanahan Water Treatment Plant which is also in full compliance with applicable State Primary Drinking Water Standards. As such an overall **satisfactory** rating has been issued.

If you should have any questions, or if I can be of any assistance, please do not hesitate to call me at 740-1590.

Sincerely,

Gregory S. Sams
District Engineer Associate
Trident EQC

GSS/

cc: Susan Alder, BOW - Compliance Assurance Division
Charleston County Environmental Health

S. C. Department of Health and Environmental Control
Bureau of Water

(A)dd, (M)odify, M
(R)enum., (D)elete.....

PUBLIC WATER SYSTEM INVENTORY REPORT FORM

Reason: Sanitary Survey

System Name: KIAWAH ISLAND UTILITY
System Number: 1010008 District (O&M): 12
Fax Number : (843)768-1816

TODAY's Date: 2/11/02

MAILING ADDRESS:
BECKY DENNIS
31 SORA RAIL ROAD
JOHNS ISLAND, SC 29455
Telephone: (843)768-0641

GEOGRAPHICAL/CONTACT ADDRESS (If Different):
KEITH WEEKS
31 SORA RAIL ROAD
JOHNS ISLAND, SC 29455
Emergency Telephone: (843)768-5566

SYSTEM CHARACTERISTICS

System Type... C
Subtype.....
Owner Type.... 4
Inact Code....
Inact Date (mo/yr)...
Begin Date (mo/yr)... 0677
Service Area.... R1
Counties Served: 10
Season On (mo/day).... 0101
Season Off (mo/day)... 1231

STATISTICAL INFORMATION

SOURCE USE INFORMATION:
Percent Surface Water..... 0
Percent Ground Water..... 0
Percent Purchased Surface Water. 100
Percent Purchased Ground Water.. 0
TOTAL MUST EQUAL 100 %

Number of Surface Water Sources.. 0
Number of Ground Water Sources... 1
Purchased Surface Water Sources... 1
Purchased Ground Water Sources.... 0
Number of Permanent SW Sources.... 0
Number of Emergency SW Sources.... 0
Number of Permanent GW Sources.... 0
Number of Emergency GW Sources.... 1

SERVICE POPULATION:
Population..... ~~2300~~ 7016
Secondary Population..... 152

NUMBER OF SERVICE CONNECTIONS:
Residential..... ~~3086~~ 2899
Non-Residential.... ~~[illegible]~~ TOTAL ~~3086~~ ~~2986~~ 3186
287
Maximum Allowable.. 23076
Permitted..... 0

PRODUCTION (MGD):
Average..... ~~1.8630~~ ~~2.14~~ 2.31 MGD
Maximum Day..... ~~3.6600~~ ~~3.385~~ 4.26 MGD

CAPACITY (MGD):
Total..... 3.6000
Emergency..... 0.7200

STORAGE:
Elevated (MG).... 0.000
Ground (MG)..... 4.500
Pressure (TG).... ~~10.000~~

COMMENTS
Capacity is based on contract with St Johns Water Co. entitling Kiawah to 60% of available water @ end of parkway Seabrook is allocated 28% and St. Johns 12%.
Prior year max day = 4.378 MGD

Report Date: 02/08/2002
DHEC 2109 (Rev. 02/91)

Signature

S. C. Department of Health and Environmental Control
Bureau of Water

PUBLIC WATER SYSTEM SOURCE/PLANT INVENTORY

(A)dd, (M)odify, (R)enum., (D)elete..... [A]

Reason: New ASR Well

System Name: KIAWAH ISLAND UTILITY
System Number: 1010008 Source ID: G10164

TODAY's Date: 2/11/02

GENERAL INFORMATION

Location: ~~DEEP WELL ONE~~ ASR #1
Source Name: ~~WATER UTILITY OFFICE~~ Sora Rail Rd
Receiving Plant... ASR #1
Plant ID..... Plant # 3

Availability Code... ~~F~~ S
Latitude.....
Longitude.....
Source Code..... G

GROUND WATER SOURCE INFORMATION

WELL CHARACTERISTICS:
Depth (ft)..... ~~1500~~ 614
Type..... ~~G~~ 4
Casing Diameter (in)..... ~~6~~ 16
Casing Type..... ~~S~~ P
Under the Direct Influence of Surface Water?..... N

WELL PUMP CHARACTERISTICS:
Horsepower..... ~~50.00~~ 75.0
Type..... ~~T~~ S
Design Yield (gpm)..... 700
Test Yield (gpm)..... ~~0~~ 1000
Avg. Daily Production(TGD)... 0.00
Regulated Capacity (TGD)..... 0.00

TREATMENT CODES

N 9970

COMMENTS

Report Date: 02/08/2002
DHEC 2114 (Rev. 02/91)

Signature

S. C. Department of Health and Environmental Control
Bureau of Water

PUBLIC WATER SYSTEM SOURCE/PLANT INVENTORY

(A)dd (M)odify, (R)enum., (D)elete..... 1A+

Reason: Routine Survey

System Name :KIAWAH ISLAND UTILITY
System Number:1010008 Source ID:P10103

TODAY's Date: 2/11/02

GENERAL INFORMATION

Location..... ~~N/R~~ Sora Rail Rd.
Source Name..... ~~N/A~~ Sora Rail Rd.
Receiving Plant... N/A
Plant ID..... N/A Plant #1

Availability Code... P
Latitude..... N/A
Longitude..... N/A
Source Code..... P

PURCHASED SOURCE INFORMATION

System Number Metered From..... 1020002
System Name Metered From... ST. JOHN'S

Average Use (MGD)..... ~~1.0330~~ 2.19
Total Capacity (MGD)... 3.6000
Number of Meters..... ~~0~~ 1

TREATMENT CODES

~~D40107~~

COMMENTS

(1) 1 MG Ground Storage Reservoir
(1) 2.5 MG Ground Storage Reservoir

(4) High Service Pumps #1 40 HP @ 800 gpm
#2 100 HP @ 1500 gpm
#3 100 HP @ 1500 gpm
#4 200 HP @ 3900 gpm

(2) Fire service pumps - Primary 200 HP @ 2500 gpm
Secondary 200 HP @ 2500 gpm

Report Date: 02/08/2002
DHEC 2114 (Rev. 02/91)

Signature

S. C. Department of Health and Environmental Control
Bureau of Water

(A)dd (M)odify, A
(R)enum., (D)elete.....

PUBLIC WATER SYSTEM SOURCE/PLANT INVENTORY

Reason: Routine Survey

System Name :KIAWAH ISLAND UTILITY
System Number:1010008 Source ID:P10103

TODAY's Date: 2/11/02

GENERAL INFORMATION

Location..... ~~N/A~~ Govenor's Dr.
Source Name..... N/A Down Island
Receiving Plant... N/A
Plant ID..... ~~N/A~~ Plant # 2

Availability Code... P
Latitude..... N/A
Longitude..... N/A
Source Code..... P

PURCHASED SOURCE INFORMATION

System Number Metered From..... 1020002
System Name Metered From... ST. JOHN'S

Average Use (MGD)..... ~~1.0530~~
Total Capacity (MGD)... ~~3.5000~~
Number of Meters..... 0

TREATMENT CODES

D4010,

Booster Station COMMENTS

(1) 1 MG ground storage reservoir

(2) 50 HP service pumps @ 1,000 gpm ea.

(2) 200 HP fire service pumps @ 4,000 gpm ea.

Report Date: 02/08/2002
DHEC 2114 (Rev. 02/91)

Signature

S. C. Department of Health and Environmental Control
Bureau of Water

(A)dd (M)odify, (R)enum., (D)elete..... [A]

PUBLIC WATER SYSTEM SOURCE/PLANT INVENTORY

Reason: New Treatment

System Name :KIAWAH ISLAND UTILITY
System Number:1010008 Source ID:P10103

TODAY's Date: 2/11/02

GENERAL INFORMATION

Location..... ~~N/A~~ Sora Rail Rd.
Source Name..... N/A ASR # 1
Receiving Plant... N/A Sora Rail Rd.
Plant ID..... ~~N/A~~ Plant # 3

Availability Code... ~~2~~ S
Latitude..... N/A
Longitude..... N/A
Source Code..... ~~2~~ S

PURCHASED SOURCE INFORMATION

System Number Metered From..... 1020002
System Name Metered From... ST. JOHN'S

Average Use (MGD)..... ~~1.0000~~
Total Capacity (MGD)... ~~2.0000~~
Number of Meters..... 0

TREATMENT CODES

~~D1010~~ D 2000

COMMENTS

Report Date: 02/08/2002
DHEC 2114 (Rev. 02/91)

Signature

S. C. Department of Health and Environmental Control - Bureau of Water

PUBLIC WATER SYSTEM SANITARY SURVEY REPORT
GROUNDWATER SYSTEMS

System Name : KIAWAH ISLAND UTILITY
System Number: 1010008 LAST SURVEY: 02/02/2000 SURVEY Date: 2/11/02

SOURCE:
1. Quantity..... S
2. Protection from contam... S
3. Security..... S
4. Wellhead piping..... S
5. Pumps..... S
6. Flow meter..... S
WATER TREATMENT:
7. Filtration..... N
8. Equipment O & M..... S
9. Chemical storage..... S
10. Chemical feed rooms..... S
11. Chemical inject pt/sam... S
DISTRIBUTION:
12. Water Quality..... S
13. Operation & Control..... S
14. Adequate pressure..... S
15. Fire flow..... S
16. X-Connection control..... S
17. Valve/hydrant maintenance. S
18. Flushing program..... S
19. Leak detection/Rp..... S
20. System map..... S
21. Sample siting plan..... S
22. Disinfectant Residual.... S
STORAGE:
23. Capacity..... S
24. Sanitary protection..... S
25. Security..... S
26. Bypass/drain/tap..... S
27. Maintenance..... S
OPERATIONAL CONTROL:
28. Certified operator..... S
29. Testing equipment..... S
30. Monitor/Rpt/Record keep. S
GENERAL O & M:
31. Plant Security..... S
32. Facility maintenance..... S
33. Supplies/spare parts..... S
34. Waste disposal..... N
35. Procedures manual..... S
EMERGENCY OPERATION:
36. Stand-by power..... S
37. Emergency plan..... S
Misc. Old Survey
38. CCR..... S

A. Plant Group (I - V)..... ~~III~~ II
B. Operator Grade
A..... 3
B..... 0
C..... 1
D..... 2
T..... ~~2~~ 1
C. Field Tests
Chlorine..... D
pH.....
psi.....
Other.....
D. Samples Taken
Bacteriological..... D
Inorganic.....
Organic.....
Radiological.....
Other.....
E. Type Inspection... ROUTINE
F. Are All Services Metered?..... Y
Percent Metered..... 100
G. Is System Presently Under Order. N
H. If Yes, is System Complying W/ Order.
I. Follow-up Scheduled?..... N
Date Scheduled..... / /
J. Overall Rating..... S
Operator/Owner Present?..... Y

COMMENTS

Distribution System Group => III

operator grade - C => 4
D => 3
T => 1

DHEC Representative

System Representative Title

DHEC 2113 (Rev 02/91)

Report Date: 02/08/2002